

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Julian D. Breckenridge

GENERAL INFORMATION:

Name:	Owensboro Specialty Polymers, LLC
Address:	5529 US HWY 60 East Owensboro, KY 42303
Date application received:	1/9/2008
SIC Code/SIC description:	2821, Plastics Materials, Synthetic and Resins, and Nonvulcanizable Elastomers
Source ID:	21-059-00155
Source A.I. #:	972
Activity ID:	APE20080001
Permit:	F-07-029 R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
<u>x</u> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
VOC	11.9	80.6
<u>SINGLE HAPs</u>		
Acrylonitrile	0.9	2.153
Acrylic Acid	0.02	0.177
Methanol	0.6	< 9.5
Methyl Methacrylate	0.7	8.155
Vinyl Acetate	1.8	< 9.5
Vinylidene Chloride	5.1	< 9.5
Combine HAPs	9.12	< 23.75

SOURCE DESCRIPTION:

Owensboro Specialty Polymers, LLC (OSP) owns and operates a batch chemical manufacturing facility in Owensboro, Kentucky. Originally built by the Dewey and Almy Chemical Division of W.R. Grace in 1958, OSP purchased the facility from W.R. Grace & Co. in September 2005. The primary products of OSP are various latex polymers, which fall under the Standard Industrial Classification (SIC) Code 2821 – Plastics Materials and Resins. There are four process groups at the facility: (1) reactor trains, (2) raw material storage tanks, (3) product storage tanks with ancillary piping, and (4) wastewater treatment facilities. Each affected facility/emission point that comprises these process groups have been grouped together for the purposes of presenting the requisite information on emissions and applicable requirements in this application. Generally, the four remaining product lines that draw raw materials from the raw material storage tanks are polymerized in the reactor trains, and the product is then transferred to the product storage tanks to await shipment.

MINOR REVISION FOR F-07-029 R1

On January 9, 2008 the Division for Air Quality received an application from OSP for a minor revision under Section 14 of 401 KAR 52:030. The request was a change to the Compliance Demonstration Method in Section B on page 3 of Permit # F-07-029. In order to demonstrate compliance for the calculation of emissions from the raw material storage tanks at the facility, OSP was required by the permit to use the United States Environmental Protection Agency's Office of Air Quality Planning and Standards, Emission Factor and Inventory Group's "Tanks" program, version 3.1 or later. The source has been using Emission Master, version 7.2 for many emission calculations. The program has a section with explanations and equations for calculating emissions from storage tanks. Currently, OSP utilizes a Microsoft Access program to calculate the raw

material storage tank emissions that was built using the same equations that Emission Master uses. The Microsoft Access Program is tied to the production and inventory systems that provide the necessary storage data to allow the emissions to be calculated in real time. Part a. of the Compliance Demonstration Method will be replaced with the following statement:

Emission Master, version 7.2 or other methods approved by the Division for Air Quality shall be used to calculate emissions from the raw material storage tanks.

The application was completed on January 28, 2008 with no change in the source's emissions inventory.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

OSP has applied to operate under federally enforceable permit limits of less than 90 tons per year of VOC, less than 9.5 and 23.75 tons per year of single and combined HAPs, respectively.

OPERATIONAL FLEXIBILITY:

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.